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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Hideo Harada

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PEARNE & GORDON LLP  
1801 EAST 9TH STREET  
SUITE 1200  
CLEVELAND, OH 44114-3108

EXAMINER

FOX, BRYAN J

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2617

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/516,968	<b>Applicant(s)</b> HARADA ET AL.	
	<b>Examiner</b> Bryan J. Fox	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-8 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 4-8 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlish in view of Imai (US006389267B1) and further in view of Asami (US 20020042287A1).

Regarding **claim 4**, Pawlish et al disclose a communication device that includes a first housing portion 11 and a second housing portion 12 hinged together with a speaker in the first housing portion and a microphone on the second housing portion (see column 2, lines 28-44 and figure 1), which reads on the claimed, "foldable mobile phone in which a first case having a transmission microphone and a second case having a first speaker are coupled to each other so as to be opened and closed freely,"

and, "a second speaker, which is provided at a portion of the second case which is exposed when the first case and the second case are closed." When the radio is in the open position, the volume of the speaker port is set to a different level than in the open position (see column 2, line 65 – column 3, lines 42), which reads on the claimed, "switching unit which switches setting functions so that a first function for communicating by using the transmission microphone and the first speaker is set in a case of communicating at a state that the first case and the second case are opened to each other, and a second function for communicating by using the transmission microphone and the second speaker is set such that the sounding volume of the receiver by the volume variable unit in a case of communicating at a state that the first case and the second case are closed to each other." A position switch used for determining the relative position of the housing portions 11 and 12 and coupled to the controller in order to provide automatic control features relating to the positions of the housing portions 11 and 12. When the radio is in the open position, a different configuration is used than when the phone is in a closed positions (see column 2, line 65 – column 3, line 42), which reads on the claimed, "the switching unit switches to the first function when the first case and the second case are opened to each other in a state that the second function is set." Pawlish et al fail to expressly disclose a first button which has a function of a first communication starting operation unit and a second button having a function of a second communication starting operation unit.

In a similar field of endeavor, Imai discloses a system where when a call arrives and the second key operation section 8 is operated, the first speech transmitting and

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receiving unit is set to be inactive and the second speech transmitting and receiving unit is set to an active state. On the other hand, when the first key operation section 5 is operated without operation of the second key operation section 8 in the step S103, the speech communication is started in the states just as it is (see column 6, lines 16-26), which reads on the claimed, "first button, which has a function of a first communication starting operation unit, and provided at a portion which is not exposed when the first case and the second case are closed but exposed in a opened state of the first case and the second case; a second button having a function of a second communication starting operation unit and provided at a portion which is exposed when the first case and the second case are closed."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Pawlish et al with Imai to include the above buttons for choosing the communication section in order to allow the user to choose the communication state. The combination of Pawlish et al and Imai fails to expressly disclose a volume variable unit which adjusts a sounding volume of the second speaker to a level substantially same as a sounding volume of the first speaker.

In a similar field of endeavor, Asami discloses the speaker 4 is controlled to the same volume as the speaker 5 (see paragraph 24), which reads on the claimed, "a volume variable unit which adjusts a sounding volume of the second speaker to a level substantially same as a sounding volume of the first speaker."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al and Imai with Asami to include the above speaker control in order to eliminate the need for the user to adjust the volume manually.

Regarding **claim 5**, Pawlish et al disclose a communication device that includes a first housing portion 11 and a second housing portion 12 hinged together with a speaker in the first housing portion and a microphone on the second housing portion (see column 2, lines 28-44 and figure 1), which reads on the claimed, "foldable mobile phone in which a first case having a transmission microphone and a second case having a first speaker are coupled to each other so as to be opened and closed freely," and, "a second speaker, which is provided at a portion of the second case which is exposed when the first case and the second case are closed." When the radio is in the open position, the volume of the speaker port is set to a different level than in the open position (see column 2, line 65 – column 3, lines 42), which reads on the claimed, "switching unit which switches setting functions so that a first function for communicating by using the transmission microphone and the first speaker is set in a case of communicating at a state that the first case and the second case are opened to each other, and a second function for communicating by using the transmission microphone and the second speaker is set such that the sounding volume of the receiver by the volume variable unit in a case of communicating at a state that the first case and the second case are closed to each other." A position switch used for determining the relative position of the housing portions 11 and 12 and coupled to the

controller in order to provide automatic control features relating to the positions of the housing portions 11 and 12. When the radio is in the open position, a different configuration is used than when the phone is in a closed positions (see column 2, line 65 – column 3, line 42), which reads on the claimed, “the switching unit switches to the second function when the first case and the second case are closed to each other in a state that the first function is set.” Pawlish et al fail to expressly disclose a first button which has a function of a first communication starting operation unit and a second button having a function of a second communication starting operation unit.

In a similar field of endeavor, Imai discloses a system where when a call arrives and the second key operation section 8 is operated, the first speech transmitting and receiving unit is set to be inactive and the second speech transmitting and receiving unit is set to an active state. On the other hand, when the first key operation section 5 is operated without operation of the second key operation section 8 in the step S103, the speech communication is started in the states just as it is (see column 6, lines 16-26), which reads on the claimed, “first button, which has a function of a first communication starting operation unit, and provided at a portion which is not exposed when the first case and the second case are closed but exposed in a opened state of the first case and the second case; a second button having a function of a second communication starting operation unit and provided at a portion which is exposed when the first case and the second case are closed.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Pawlish et al with Imai to include the above buttons for choosing the communication section in order to allow the user to choose the communication state. The combination of Pawlish et al and Imai fails to expressly disclose a volume variable unit which adjusts a sounding volume of the second speaker to a level substantially same as a sounding volume of the first speaker.

In a similar field of endeavor, Asami discloses the speaker 4 is controlled to the same volume as the speaker 5 (see paragraph 24), which reads on the claimed, "a volume variable unit which adjusts a sounding volume of the second speaker to a level substantially same as a sounding volume of the first speaker."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al and Imai with Asami to include the above speaker control in order to eliminate the need for the user to adjust the volume manually.

Claims 6, 7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlish et al in view of Imai and Asami as applied to claims 4 and 5 above, and further in view of Ishinabe et al (US005600655A).

Regarding **claim 6**, the combination of Pawlish et al, Imai and Asami fails to expressly disclose the second button has a function of a first communication terminating



operation unit for terminating the communication when the second button is operated during communication.

In a similar field of endeavor, Ishinabe et al disclose a communication key used for start/end of communication (see column 2, lines 57-67 and figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al, Imai and Asami with Ishinabe et al to include the above key that starts and ends communication in order to save space in the keypad.

Regarding **claim 7**, as applied to claim 6, the above combination of Pawlish, Imai, Asami and Ishinabe et al discloses continuously operating the second button for a predetermined time period (see column 2, lines 28-44), wherein if the button is pressed at all the operation would read on the continuously operating for a predetermined time period wherein the time period is small.

Regarding **claim 10**, the combination of Pawlish et al, Imai and Asami fails to expressly disclose the second button has a function of a first communication terminating operation unit for terminating the communication when the second button is operated during communication.

In a similar field of endeavor, Ishinabe et al disclose a communication key used for start/end of communication (see column 2, lines 57-67 and figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al, Imai and Asami with Ishinabe

et al to include the above key that starts and ends communication in order to save space in the keypad.

Regarding **claim 11**, as applied to claim 6, the above combination of Pawlish, Imai, Asami and Ishinabe et al discloses continuously operating the second button for a predetermined time period (see column 2, lines 28-44), wherein if the button is pressed at all the operation would read on the continuously operating for a predetermined time period wherein the time period is small.

Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlish in view of Imai and Asami as applied to claim 2 above, and further in view of what was well known in the art (see MPEP 2144.03).

Regarding **claim 8**, the combination of Pawlish et al, Imai and Asami suggests a recessed button 14 at an outer face (see figure 1). The combination of Pawlish et al, Imai and Asami fails to expressly disclose the second button is disposed within a recess portion formed at an outer face of at least one of the first case and second case.

The examiner takes official notice that a button disposed within a recess portion formed at an outer face of at least one of the first case and second case was well known to a person of ordinary skill in the art at the time of the invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al, Imai and Asami such that the second button is disposed within a recess portion formed at an outer face of at least one

of the first case and second case in order to lessen the likelihood of accidentally operating the button.

Regarding **claim 12**, the combination of Pawlish et al, Imai and Asami suggests a recessed button 14 at an outer face (see figure 1). The combination of Pawlish et al, Imai and Asami fails to expressly disclose the second button is disposed within a recess portion formed at an outer face of at least one of the first case and second case.

The examiner takes official notice that a button disposed within a recess portion formed at an outer face of at least one of the first case and second case was well known to a person of ordinary skill in the art at the time of the invention.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Pawlish et al, Imai and Asami such that the second button is disposed within a recess portion formed at an outer face of at least one of the first case and second case in order to lessen the likelihood of accidentally operating the button.

### ***Response to Arguments***

Applicant's arguments with respect to claims 4-8 and 10-12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox  
May 28, 2007

  
CHARLES N. APPIAH  
SUPERVISORY PATENT EXAMINER